

## REMARKS

1. Entry of the foregoing, and further and favorable reconsideration of the above-cited application is respectfully requested. By the present Amendment, the specification has been amended to insert SEQ ID numbers at pp. 11 and 12. Claim 19 has been amended to depend from claim 18 rather than from claim 19. No new matter has been added.

### **2. *Election by Original Presentation***

Turning now to the Official Action, at pp. 2-3 the Examiner has applied the Restriction Requirement made in the Official Action of December 18, 2002 (Paper No. 6) to the newly added claims, and has withdrawn claims 10, 11, 14-17, 20 and 21 from consideration as directed to a non-elected invention. Applicants hereby renew their traversal of the Restriction Requirement, on the bases discussed in detail in Applicants' Reply filed January 21, 2003. Applicants gratefully acknowledge the indication by the Examiner, at pp. 2-3 of the Official Action, that "method claims commensurate in scope with the originally elected invention will be rejoined if the claims to said invention are found allowable and the rejoined claims do not contain any issues under 35 USC §112." Applicants respectfully submit that the withdrawn method claims are indisputably "commensurate in scope" with the elected protein and composition claims.

### **3. *Oath/Declaration***

Applicants gratefully acknowledge the Examiner's withdrawal of the objection to the Declaration in the present case.

**4. Specification**

At p. 3 of the Official Action, the specification has been objected to on the basis that the sequences at pp. 11 and 12 of the specification lack SEQ ID numbers. By the present amendment, pp. 11 and 12 of the specification have been amended to insert SEQ ID numbers where appropriate.

**5. Claim Objections**

A. At p. 3 of the Official Action, the Examiner has objected to claims 12, 13, 18, and 19 on the basis that the syntax of claim 12 would be improved by replacing the recitation of "derived from" in claim 12 with "obtained from" or "isolated from."

Applicants respectfully disagree; however, Applicants hereby express their willingness to consider amending this limitation in claim 12 upon indication that the claims are otherwise in condition for allowance.

B. Also at p. 3 of the Official action, the Examiner has objected to claim 19 on the basis that it depends from itself. By the present Amendment, claim 19 has been amended to depend from claim 18 as suggested by the Examiner.

**6. Claim Rejections – 35 USC §112, first paragraph – enablement.**

A. At pp. 3-4 of the Official Action, claim 19 is rejected as purportedly broader in scope than the enabling disclosures provided by the present specification. This rejection is respectfully traversed.

At p. 3 of the Official Action, the Examiner concedes that the present specification is "enabling for the claimed fibrinogen binding protein for use in inhibiting staph binding to fibrinogen in mammals." However, at p. 4 of the Official

Action, the Examiner asserts that the recitation of “pharmaceutically acceptable” carrier renders claim 19 an “intended use” of the claimed protein “for treating any and all diseases.”<sup>1</sup> Applicants respectfully submit that the limitation in claim 19, that the carrier is pharmaceutically acceptable, does not itself define a use for the claimed composition. The scope of the recited claims encompasses proteins, and compositions. The limitation that the carrier is pharmaceutically acceptable defines only the particular carriers that may be employed in the claimed composition. Such pharmaceutically acceptable carriers are well-known in the art, and one of ordinary skill would readily formulate such a composition, for any desired use, without the need for undue experimentation. Applicants respectfully submit that there is no legal basis to ascribe a particular use to the claimed composition, on the basis that the recited carrier is limited to those carriers having particular characteristics. Accordingly, the present claims, directed to proteins and compositions, are enabled for their full scope, and withdrawal of this rejection is respectfully requested.

**7. *Claim Rejection – 35 USC §112, first paragraph – written description.***

Claim 19 is rejected under 35 USC §112, first paragraph, as purportedly unsupported by an adequate written description in the specification. This rejection is respectfully traversed.

At p. 4 of the Official Action, the Examiner asserts that “this is a genus claim.”

Applicants agree. However, Applicants respectfully disagree with the Examiner

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<sup>1</sup> Applicants do not agree with the Examiner's statement at p. 4 of the Official action that “Applicants provide no guidance or working examples of any diseases which can be treated by using the Staph binding protein of the invention other than to inhibit Staph binding to fibrinogen.” Applicants respectfully direct the Examiner's attention to the guidance provided at pp. 6-7 of the specification, which relate that the claimed protein can be used, *e.g.*, to treat staph infections, immunizing treatment of wounds, mastitis, heart valve infection, hip replacement surgery, etc.

regarding the nature of the genus. Applicants submit that the genus described by claim 19 is a genus of compositions comprising the protein of claim 12, and a pharmaceutically acceptable carrier. Claim 19 does not define "a genus of diseases to be treated by the claimed protein" as asserted by the Examiner.<sup>2</sup> Applicants respectfully submit that one of ordinary skill in the art would not reasonably doubt that the inventors were in possession of the invention of claim 19 – a composition comprising the protein of claim 12 and a pharmaceutically acceptable carrier – at the time the invention was made. Accordingly, withdrawal of the present rejection is respectfully requested.

**8. Claim Rejections – 35 USC §102**

A. Applicants gratefully acknowledge the indication by the Examiner at page 5 of the Official Action that the rejection of claims 12 and 13 under USC 102(b) as purportedly anticipated by Palma et al. has been withdrawn.

B. Claims 12, 13, 18 and 19 are rejected under 35 USC 102(b) as purportedly anticipated by Boden et al. This rejection is respectfully traversed.

At p. 5 of the Official Action, the Examiner asserts that "the effective filing date of the present application is 5/23/94, the filing date of U.S. Application 08/244,229." However, as can be seen from the attached Official Filing Receipt from Serial No. 08/244,229, that application was a 371 of PCT/SE 93/00759, and not a continuation of that PCT application. Applicants further note that Boden et al. is not 102(b) prior

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<sup>2</sup> Applicants respectfully disagree with the Examiner's statement, at p. 4 of the Official Action, that "[t]he specification and claims do not indicate what distinguishing attributes are shared by the members of the genus of diseases to be treated by the claimed protein other than to inhibit Staph binding to fibrinogen." Applicants respectfully submit that the genus of diseases which may be treated by the protein of the claimed invention is unambiguously stated in the application; that genus comprises *S. aureus* infections in humans and in animals. See pp. 6-7 of the specification.

art against the rejected claims, because it does not disclose every limitation of these claims, as required by 35 USC 102(b). As discussed in detail at p. 3 of the Official Action mailed March 27, 2003 (Paper No. 8), Boden et al. "do not teach that this protein produces fragments of 50, 45, 40 and 30 kD when digested with V-8 protease," nor does Boden et al. disclose the compositions of the rejected claims.

For the foregoing reasons, withdrawal of this rejection is respectfully requested.

**9. Conclusion**

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

In the event that there are any questions concerning this paper or the application in general, the Examiner is respectfully urged to telephone Applicants' undersigned representative so that prosecution of the application may be expedited.

Respectfully submitted,

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